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THE NAMES OF SOME OF OUR NATIVE FERNS

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The publication of a complete index of fern names * has necessarily resulted in disclosing some overlooked duplications, some of which affect the names currently used in American text-books. For a European, Mr. Christensen has given a remarkably liberal treatment, and follows not only the American system of citation, but in the main the principles adopted in America underlying the selection of names. For example, homonyms are quite uniformly rejected and treated after the American fashion.

The unanimity of practice anticipated by some of our conservative friends as one of the benefits of "an *authoritative* international Congress" has failed to materialize among the ferns at least. Some recent publications professedly or supposedly in accord with the rules of the Vienna Congress must have afforded rude shocks to those whose expectations rose high in anticipation of "an authoritative standard."

For example, while Mr. Christensen, Dr. Christ, Professor Urban and Professor Hieronymus of Berlin, and Dr. Rosenstock have all taken up *Dryopteris* in accordance with correct principles of nomenclatural priority, the New England botanists have pronounced in favor of *Aspidium*, and the English botanists have taken up *Lastrea* for the same group. Without question, should the French make an official pronouncement, they would use *Polystichum*, thus continuing their practice in more or less recent manuals and botanical garden labels.

At present the common male-fern bears five names which have been announced since the appearance of the Rules of Nomen-

* Christensen, Carl. Index Filicum. 1905-6.

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clature of the Vienna Congress — a state of discord not entirely unexpected by those who took part in the proceedings of that body.

The current nomenclature of the male-fern is as follows :

1. DRYOPTERIS FILIX-MAS.—American usage since 1893; adopted by Professors Urban and Hieronymus (Berlin); Dr. Christ (Basel); Dr. Rosenstock (Gotha); Mr. Christensen (Copenhagen).
(DRYOPTERIS Adans., 1763.)
2. POLYSTICHUM FILIX-MAS. — French usage.*
(POLYSTICHUM Roth, 1799.)
3. ASPIDIUM FILIX-MAS. — Cambridge (Mass.) usage.†
(ASPIDIUM Swartz, 1801.)
4. NEPHRODIUM FILIX-MAS. — Fern Bulletin; Kew (ancient practice).‡
(NEPHRODIUM Rich., 1803. §)
5. LASTREA FILIX-MAS. — British Museum. ||
(LASTREA Bory, 1826.)

Following Diels (Die nat. Pflanzenf.) and Urban (Symb. Antill.), Christensen combines all the reniform-indusiate, non-indusiate, free-veined and connate-veined members of the tribe Dryopterideae in a single genus, *Dryopteris*. This would unite (in our flora) the genera *Phegopteris*, *Goniopteris*, and *Meniscium* with the wood-ferns of the genus *Dryopteris*. Pending further study

* As commonly seen in labels in botanical gardens; also in recently published works as: **Coste**. Flore descriptive et illustrée de la France 3: 686-688. 1906. In this work *Polystichum* and *Aspidium* are used for groups diametrically opposite to New England usage.

† Cf. Rhodora 9: 81-86. 1907, where the allies of this species in the flora of "the Boston District" are placed under *Aspidium*, and the Christmas-fern is retained in *Polystichum*.

‡ No recent official pronouncement of the Kew position on this genus has been received; we await with interest to see if there will be a change and if so whether it will be aspidioid.

§ The earlier and doubtful publication by Richard (?) in Marthe's Cat. pl. Jard. med. Paris, 1801, in accord with strict rules will have to be set aside as a hyponym.

|| As expressed in the new Catalogue of British Plants (1907), "revised in accordance with the International Rules of Botanical Nomenclature adopted by the Botanical Congress at Vienna, 1905."

of this complicated generic tangle of affinities, we are unable to follow the Continental botanists in this matter. Absolute consistency is not to be looked for in generic separation, but when *Diplazium* and *Athyrium* are kept distinct from *Asplenium* by such meager and graduated characters, *Elaphoglossum* from *Acrostichum*, and *Polystichum* from *Dryopteris*, we see no consistency in uniting *Meniscium* with *Dryopteris*, or *Campyloneurum* with *Polypodium*. There is perhaps more reason for the union of *Phegopteris** and *Dryopteris*, since the difference is one which concerns mainly indusial characters. In any case, a knowledge of the European and United States species merely is insufficient to form a reasonable basis for a proper settlement of the question, and words based on such a knowledge are mere waste of breath.

Among the necessary changes we note the following :

✓ **Ceratopteris pteridoides** (Hook.)

Parkeria pteridoides Hook. Exot. Fl. 2: pl. 147. 1825.

After much study of living and herbarium material we are convinced that the determinable American material we have seen extending in range from Guiana, the type locality of Hooker's species, to Florida represents a plant entirely distinct from the species of the Old World which was included by Linnaeus under his two species, *Acrostichum siliquosum* and *Acrostichum thalictroides*, and commonly known under the name *Ceratopteris thalictroides* since Brongniart established that genus. Hooker's type and excellent figures well represent the plant occasional in our American tropics and often seen in cultivation.

The American plant has leaves much less divided than its Old World congener and is everywhere excessively proliferous, growing young plantlets over its surface at the sinuses of the leaves, and even in the axils of the sporophylls. Christensen follows the customary reference of the American plant to *Ceratopteris thalictroides* (L.) Brongn., but if, as appears, there is only a single species in the Old World, that name is not a valid one. There is a slight suspicion that the Old World species may also appear in

* In the new catalogue of British plants (1907) the species of *Phegopteris* are still retained in the genus *Polypodium* in accordance with the ancient Linnaean conception of that genus.

America as an introduced plant. Curtiss' collections in Florida (Nos. 3690 and 5973) well represent the American plant, as do the similar ones of Jenman from Guiana. *Parkeria* is one of five generic names which have been independently proposed for this group of plants and was based on Parker's original collection in Guiana, a duplicate sheet of which appears in the herbarium of Columbia University.

POLYPODIUM GLYCYRRHIZA D. C. Eaton. Am. Jour. Sci. II, 22: 138. 1856

This properly takes the place of *P. falcatum* Kellogg, 1854, (not *P. falcatum* Linn. f. 1781) and of *P. occidentale* Maxon, 1904, the latter taken up from a still earlier varietal name of Hooker.

The abandonment of the validity of varietal names* was the principal compromise on the part of the adherents of the American code at the Vienna Congress. The above nomenclature is therefore in accord with both the Vienna and the American codes, and is based on the correct principle that *species* are the units of classification.

PALTONIUM LANCEOLATUM (L.) Presl, Epim. Bot. 156. 1851, appears to be the proper name for *Pteris lanceolata* L. (*Tacnitis lanceolata* Kaulf.), for which we proposed Blume's subgeneric name *Cheilogramme* in 1900.

PTERIS MULTIFIDA Poir. Encyc. Bot. 5: 714. 1804

The above name should be used for the plant commonly called *Pteris serrulata* Linn. f. (1781). The earlier *Pteris serrulata* Forsk. (1775) renders Linnaeus' name untenable. In this case there is an even stronger reason: in reducing *P. serrulata* Linn. f. to synonymy under *P. multifida*, Mr. Christensen continues an error most of us have followed without actually looking up the type locality of Linnaeus' plant. As a matter of fact *Pteris serrulata* is not only not a synonym of *Pteris multifida* at all; it

*This principle was adopted in America by a small majority in 1893-4 and in practice has worked havoc with many otherwise valid specific names. Probably two thirds of the opposition to the Madison modification of the Rochester rules arose from the adoption of this one principle.

is not even a *Pteris*, but a straight synonym of *Trismeria trifoliata* of the American tropics. Linnaeus' son described *Pteris serrulata* as from Jamaica and cites Sloane *pl. 45. f. 2* and Plumier *pl. 144*, the identical illustrations cited by his father in describing *Acrostichum trifoliatum* (*Gymnogramme trifoliata* Desv., *Trismeria trifoliata* Diels) twenty-eight years earlier.

Pteris multifida was published with a short Latin diagnosis followed by an ample comparative description in French, which ends with the following statement: "Cette plante est cultivée au Jardin du Muséum d'histoire naturelle de Paris. Son lieu natal ne m'est pas connu." The type locality of this species, therefore, remains unknown, and its long period of existence in cultivation, coupled with its ready propagation by spores, renders its original habitat somewhat difficult to prove. Its native country is usually supposed to be China and Japan. It is an escape from cultivation in several of our southern States, in Jamaica and Guadeloupe, and is likely to be found in any of the warm-temperate or tropical countries, where it is frequently cultivated.

PELLAEA MUCRONATA D. C. Eaton

This name must replace *Pellaea Wrightiana* Hook. The continued use of the latter name is due to a curious oversight of the application of the so-called "Kew rule." The plant was originally described as *Allosorus mucronatus* D. C. Eaton (1856). When Hooker took up Link's genus *Pellaea* in *Species Filicum* (1858) he followed a common practice of his day and renamed the species *Pellaea Wrightiana*, thus making his own name the "first name under the genus." Eaton did not transfer his own name *mucronata* until a year later (1859) and his earlier publication was not unnaturally overlooked. The abolition of the Kew Rule by the Vienna Congress will render this change equally binding on those who recognize its authority. Under the American code it is a simple matter of justice and it becomes a pleasure to restore one of Professor Eaton's names.

PELLAEA SCABRA C. Chr. Ind. Fil. 483. 1906

Cheilanthes aspera Hook. 1858 (not *C. aspera* Kaulf. 1831).

Pellaea aspera Baker, Syn. Fil. 148. 1867.

The change appears to be warranted.

ASPLENium ABCISSUM Willd. Sp. Pl. 5: 321. 1810

Asplenium firmum Kunze (1845) appears to be identical with this widely distributed tropical species and hence falls under it in synonymy.

ASPLENium CRISTATUM Lam. Encyc. Bot. 2: 310. 1786

Asplenium cicutarium Sw. (1788), proving an exact synonym, must yield to the earlier name. The occurrence of this common tropical American fern in Florida rests on a single meager collection. Further information of its occurrence within the limits of the United States is greatly to be desired.

Mr. Christensen has made a few other changes, particularly in *Notholaena* and *Pellaea*, which we are not prepared to adopt, pending a revision of the species of these groups. Among these is the transfer of *Notholaena dealbata* and *N. tenera* to *Pellaea*. *Pellaea densa*, which Diels transferred to *Cryptogramma* in 1899, Christensen restores to *Pellaea*.

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A LONG ISLAND CEDAR-SWAMP

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No cedar swamp on Long Island (or any other island, for that matter) seems to have ever been described in botanical literature, though evidences of the occurrence of such places on the island are not wanting. Such swamps, at least in the coastal plain and southeastern part of the glaciated region of North America, are characterized by the white cedar, or "juniper," *Chamaecyparis* (formerly *Cupressus*) *thyoides*; and Dr. Torrey says of this species in his *Flora of New York*, published in 1843: "Long Island, where, in several places (as near Rockaway, Hempstead, Babylon and Islip) it occurs in considerable quantities." The localities mentioned are all in the coastal plain,* but I do not know that any of them have been verified in late years.

* Some maps of Long Island (such as can be seen in almost any railroad station on the island) show a settlement named "Cedar Swamp" about three and one half